

**Histone H3 Antibody (S10) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1051d****Specification**

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**Histone H3 Antibody (S10) Blocking Peptide - Product Information**Primary Accession [P84243](#)**Histone H3 Antibody (S10) Blocking Peptide - Additional Information****Gene ID** 3020;3021**Other Names**

Histone H33, H3F3A, H33A, H3F3

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1051d](/products/AP1051d) was selected from the S10 region of human Histone H3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Histone H3 Antibody (S10) Blocking Peptide - Protein Information****Name** H3-3A ([HGNC:4764](#))**Synonyms** H3.3A, H3F3, H3F3A**Function**

Variant histone H3 which replaces conventional H3 in a wide range of nucleosomes in active genes. Constitutes the predominant form of histone H3 in non-dividing cells and is incorporated into chromatin independently of DNA synthesis. Deposited at sites of nucleosomal displacement throughout transcribed genes, suggesting that it represents an epigenetic imprint of transcriptionally active chromatin. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

**Cellular Location**

Nucleus. Chromosome

**Histone H3 Antibody (S10) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**Histone H3 Antibody (S10) Blocking Peptide - Images****Histone H3 Antibody (S10) Blocking Peptide - Background**

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. The protein targeted by this antibody is a replication-independent member of the histone H3 family.

**Histone H3 Antibody (S10) Blocking Peptide - References**

Marzluff, W.F., et al., Genomics 80(5):487-498 (2002). Albig, W., et al., Hum. Genet. 101(3):284-294 (1997). Albig, W., et al., Genomics 40(2):314-322 (1997). Albig, W., et al., Genomics 10(4):940-948 (1991).